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Electronic Law Searching

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R13 Guilford, op. cit. supra, 237-238; Siegal, NON-PARAMETRIC STATISTICS FOR THE BEHAVIORAL SCIENCES, 42-47.

R14 Guilford, op. cit. supra, 297-305, 358-362; Walker and Lev, op. cit. supra, 261-271.

R15 Guilford, op. cit. supra, 135-151, 362-379; Walker and Lev, op. cit. supra, 230-260.

1b. ELECTRONIC LAW SEARCHING

The 83rd Annual Meeting of the American Bar Association in Washington, D. C., saw the first public demonstration of workable methods of searching statutes and case law with the aid of modern electronic computers. The basic method shown was one developed at the University of Pittsburgh in connection with the work of its Health Law Center.

All the state health laws were put on punched cards and fed into a general purpose IBM 650 to create a text tape containing the text of those statutes. Complete text was used on the premise that the specific words used in a statute are almost always a reliable clue to its subject matter. From this text tape the machine was programmed to construct a concordance or alphabetical word list of all the words of those statutes except those having no search value (words such as "a", "the", "by", "with"). The print-out of this list served as the basis for all inquiries. Three kinds of inquiries were then possible: How many statutory provisions containing the words selected did the machine contain? What were the citations to those provisions? What was the text of those provisions?

The importance of such an approach is that, by dispensing with coding, digests, and classification systems, it interposes nothing between the searcher and his materials. On the other hand, it places a correspondingly higher burden on the imagination, resourcefulness, and care of the searcher. Because the machine deals only with specific symbols and can solve none of the semantic problems created by synonyms and ambiguities, the searcher must anticipate every possible descriptive word variant, including misspellings, that the particular kind of provision sought might contain. Thus, framing an adequate inquiry entails not only identifying the underlying concepts that each statute sought must contain (these must be couched in the conjunctive) but anticipating for each such concept all the synonymous expressions that the several legislatures have probably used to express it (these must be couched in the disjunctive). Moral: the machine replaces neither the lawyer nor any basic step of legal analysis.

When properly framed, the inquiry is put on punched cards and fed into the machine in the same way as the original materials. The machine then takes over. The particular search demonstrated in Washington involved a split-listing tax problem, and the process of searching, selecting, and printing the citations and text of the 19 relevant statutes took only 26 minutes, as against a manual state-by-state search of several days.

Also demonstrated were modified applications of this technique to the searching of food product liability and oil and gas case law. Here,

instead of the full text of the opinions, the punched cards and text tape contained only case digests. The answers produced by the machine were correspondingly restricted. This approach is more economical than that used for searching the health statutes because it drastically cuts the time and expense of cutting punched cards and of building the basic word list. It also gives the searcher the benefit of a professional digester. On the other hand, it has the disadvantage of exposing him to the fallibilities of the digester, who may be somewhat less resourceful, with respect to the problem at hand, than the particular searcher. The further development and greater accessibility of punched tape and electronic scanners may some day make practicable the word-for-word committal of even judicial opinions to tape.

Finally, a search of design patent decisions was conducted by the United States Patent Office. It used a RAMAC 305 and a somewhat different method of digesting and classifying the source materials.

The demonstrations showed that electronic searching is workable technically and that it retains the advantages of a traditional manual search without taking a long time or failing to uncover all the relevant materials. The problem now is to determine under what conditions a legal problem justifies the use of these machines. At present these appear to be the important factors: the general importance of the problem, the money involved, the scattering of the materials among many jurisdictions, the need for comprehensiveness, and the need for speed.

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Ic. LOGIC IN LAW SCHOOLS IN POLAND

From 1946 logic has been a required part of the curriculum in law schools in Poland (Warsow, Cracow, Poznan, Lodz, Lublin, Wroclaw, Torun). There are 60 hours of lectures and classes of this subject in the first year of law studies. Initially the lectures in logic for lawyers were given only by professional logicians. The first handbook of logic for lawyers was prepared by Professor Tadeusz Kotarbinski. There was no great difference between the lectures in logic (in the broad meaning of this term) in the law schools and in the other faculties of Polish universities.

Actually, two different tendencies can be observed:

1. the old one - to give lectures in elementary logic as a subject of general education for young students, and
2. the tendency to adapt the program of logic to the specific professional needs of the lawyers.

The latter tendency is represented not only by lawyers teaching the elements of logic in law schools, but also by many professional logicians (Section of "practical logic" in the Institute of Logic in the Polish Academy of Sciences - director: Professor Maria Kokoszynska). The practical needs - in relation to the Polish law system - require a limitation of the part concerning theoretical foundations of formal logic in the elementary lectures, to the extent that the material is not necessary as a starting point